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ABSTRACT

Australia's national vocational education and training (VET) system and nationally funded technical and further education colleges were established in the 1970s. In the 1980s, traineeships complementing traditional apprenticeships and competency-based training were instituted. An industry-led training system was established in the 1990s. Total VET participation reached 1.5 million (12% of the working-age population) in 1998, and apprentices and trainees totaled 250,000 in 1999. Australia's public system of formal VET receives some $4 billion in public funding annually, with employers investing an additional $4.7 billion in structured and unstructured training. The following are among distinguishing features of Australia's VET system: a clear national policy for VET; movement toward lifelong learning; development of advanced and high-level skills training; development of an industry-led training sector; flexible delivery and modularization of training delivery; competition among training providers; a strong system of public training institutions; a framework for national

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recognition of VET; and focus on outputs and outcomes. Issues expected to have a significant impact on Australia's VET system in the near future include the changing nature of work, a trend toward customizing VET, the aging population, and movement toward a lifelong learning culture. (Twenty-seven tables/figures are included. The bibliography lists 36 references.) (MN)

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DEVELOPMENTS IN AUSTRALIA'S VOCATIONAL EDUCATION AND TRAINING SYSTEM

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Abstract

The major developments in Australia's technical vocational education and training (TVET) system over the past 20-30 years are described in this paper. The TVET system in Australia is formally known as the Vocational Education and Training system (VET). So I will refer to the VET system rather than the TVET system throughout the rest of the paper. These major changes over the past 30 years include

- the establishment of the national VET system with nationally funded Technical and Further Education (TAFE) Colleges in the 1970s
- the establishment of traineeships to complement the traditional apprenticeship system in the 1980s
- the decision to implement competency-based training in the late 1980s
- a raft of more recent reforms and developments during the 1990s, including the development of an industry-led training system and a prominent role played by industry training bodies have played in the development of national training packages.

The structure of the Australian VET system and major trends in participation and outcomes are presented. Key developments are that total VET participation reached 1.5 million (or 12% of the working age population) by 1998, and the total number of apprentices and trainees reached a record 250,000 during 1999.

The formal publicly funded VET system amounts to some $A4 billion or 0.8% of Gross Domestic Product (GDP). In addition employers invest a further $4.7 billion in structured and unstructured training. The nature of this training is also described.

Details of the VET certification system in Australia is described, including information about the Australian Qualifications Framework, the accreditation of VET courses and programs and the process of registration and accreditation of training providers.

Some of the key and distinguishing features of Australia's VET system are then considered. These include

- having a clear national policy for VET
- moving towards lifelong learning
- developing advanced and high-level skills training
- competency-based training
- the development of an industry-led training sector
- flexible delivery and the modularisation of training delivery
- establishing competition amongst training providers
- a strong system of public training institutions
- a framework for the national recognition of VET
- a focus on outputs and outcomes
- the role of research and evaluation to improve VET.

Finally, consideration is given to the likely impact on VET of some emerging issues, which will be critical to the future development of VET in Australia. These are the impact of the changing nature of work, learner and enterprise demands for far more customisation of training, the profound implications of a rapidly aging population and the challenges to be faced in embedding a continuous and lifelong learning culture in society.

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1. Introduction

Australia has put substantial reforms into place to its vocational education and training (VET) system over the past 20 to 30 years in order to try to better meet a rapidly changing set of economic and social needs.

Considerable emphasis has been placed on the development of a VET system that is able to develop the contemporary skills of the workforce to enable Australia to better adjust to the rapid technological change and the increasing globalisation of the world economy.

The Australian VET system has evolved over a long period of time. Some of the key developments and milestones are:

- early 1800's—the 'transportation' of the craft based apprenticeship system from England
- early 1800's to 1960's
  - the gradual expansion of apprenticeships across different craft areas/occupations, but in a different way in different colonies or states and territories
  - the gradual establishment of 'mechanics institutes', technical colleges, technical secondary schools and other technical, vocational education and training institutions in different ways in different jurisdictions (with little national government funding)
- 1970's—the establishment of the modern VET system through
  - the establishment of a national system of publicly funded Technical and Further Education (TAFE) institutes and the introduction of significant national government financial support for TAFE following the release of the Kangan Report (Kangan 1975)
  - the introduction of national government subsidies for apprenticeships
- early 1980's—the National Centre for Vocational Education Research (NCVER) is established, then it was called the TAFE National Research and Development Centre
- mid 1980's—the establishment of the traineeship system to compliment apprenticeships following the release of the Kirby Report in 1985 (Kirby 1985)
- late 1980's—the decision to implement competency-based training
- 1990—the number of apprentices reaches a yet to be broken record of just over 160,000 (but traineeships are still less than 12,000 at this time)
- 1992—the Australian National Training Authority (ANTA) is established
- 1992—the total number of VET students in Australia reaches 1 million for the first time
- 1995—the Australian Qualifications Framework (AQF) is established to bring all post compulsory education and training qualifications into the one national system of qualifications
- early 1990's—competition to TAFE's monopoly on VET provision is gradually introduced through some tendering of publicly funded VET to private training providers
- mid 1990's—the decision is taken to start developing National Training Packages to be introduced across a wide range of industries and occupations
- 1998—the New Apprenticeship system commences encompassing the former apprentice and traineeship systems, including the commencement of user choice
- 1998—the Australian Recognition Framework (ARF) is established
- 1998—the number of VET students in Australia reaches a record 1.5 million
- 1999—the number of New Apprentices (ie apprentices and trainees) reaches 250,000

These developments and the contemporary VET system in Australia are described in this paper. In doing so the work of Robinson 1999a and Alto et al 2000 is drawn upon. Further information about Australia's training system is given in Smith 1998 and 1999. Historical developments in Australia's VET system are described in detail in Goozee 1995 and Ray (forthcoming).

Notwithstanding the very significant differences between China and Australia in terms of culture, population size and so forth, there are some considerable similarities in the training issues being faced in both countries. For instance, both countries recognise the importance of training in skilling the workforce to meet the challenges of the information age. This paper has been developed to provide detailed information about VET developments in Australia.

2. The structure of Australia's VET sector

2.1 The pathways for gaining vocational skills

There are many and various ways in which people in Australia gain the skills needed to enter the workforce for the first time, to re-enter the workforce, to retrain for a new job or to upgrade skills for an existing job.

These pathways include:

- gaining job-related skills through general secondary education or through a specific VET program run in schools
- gaining work skills through undertaking a VET module offered by a Technical and Further Education (TAFE) institute or another registered VET provider
- gaining more intensive work skills through participation in a full VET course offered by a TAFE institute or other registered VET provider leading to a certificate or diploma qualification
- undertaking an apprenticeship or traineeship with a registered VET provider that usually combines formal training with on-the-job training
- gaining of professional skills through a graduate or post-graduate award program at a university
- job related skills gained through training provided to employees by employers which may be:
  - formal and lead to a nationally accredited certificate or diploma
  - structured but not articulated to a formally recognised qualification
  - unstructured training provided on-the-job that has no predetermined training plan or organised content

A myriad of other training or adult education programs exist in Australia that are job-related to varying degrees. They are provided on a fee-for-service basis by various private (registered or unregistered) training organisations and adult and community education organisations.

Australia does not have a widespread system of specialist vocational secondary schools or technical high schools. Several decades ago some parts of Australia did have such a system. However, today specific vocational programs within general secondary schools are becoming increasingly popular, and a few specialist vocational high schools are beginning to re-emerge.

However, not all of the above education and training pathways are considered to be part of the vocational education and training sector in Australia. The VET sector normally refers to a recognised VET program undertaken through a registered training provider. Most VET programs are undertaken in a TAFE institute, although private training organisations and adult community education providers are becoming increasingly important providers of VET. Some enterprises, schools and universities are registered VET providers, although most schools and universities are not registered providers of formal VET programs.

Thus most university programs, general secondary education and instructional training provided by employers and most programs provided on a fee for service basis by private and community training organisations are not considered part of the formal VET sector in Australia. Nevertheless, these other skill formation pathways are also important in the total development of work-related skills in Australia.

2.2 The major organisations involved in VET

Australia has a complex VET system as can be seen from Figure 1. The national system is a joint responsibility of the national (ie Commonwealth) government and the eight State and Territory (ie provincial) governments.

The key national decision making body is a council of ministers responsible for training from the national and State/Territory governments (known as the ANTA Ministerial Council— MINCO). This Ministerial Council also takes account of the decisions of a larger national ministerial council namely, the Ministerial Council for Employment, Education, Training and Youth Affairs (MCEETYA). MCEETYA frames national policy across the wider policy sphere of employment, education, training and youth affairs issues.

The key national agency with responsibility for advising on national planning, funding and strategic objectives to achieve a national focus for VET in Australia ANTA. ANTA is a Commonwealth statutory authority that is governed by an industry board.

The national government through the Commonwealth Department of Education, Training and Youth Affairs (DETYA) and each State and Territory training authority have a prime policy and operational responsibilities to implement agreed national VET decisions in their respective jurisdictions.

The training authority in each State and Territory is responsible for:

- on-going management of government providers and registration of non-government providers in vocational education and training
- implementation of the national recognition framework, which is progressively replacing the former national curriculum arrangements
- management of the State or Territory training profile
- allocation of funds to vocational education and training providers to meet targets specified in the State or Territory training profile and ANTA 'growth-through-efficiency' targets
- collecting and reporting information under agreed national reporting arrangements.

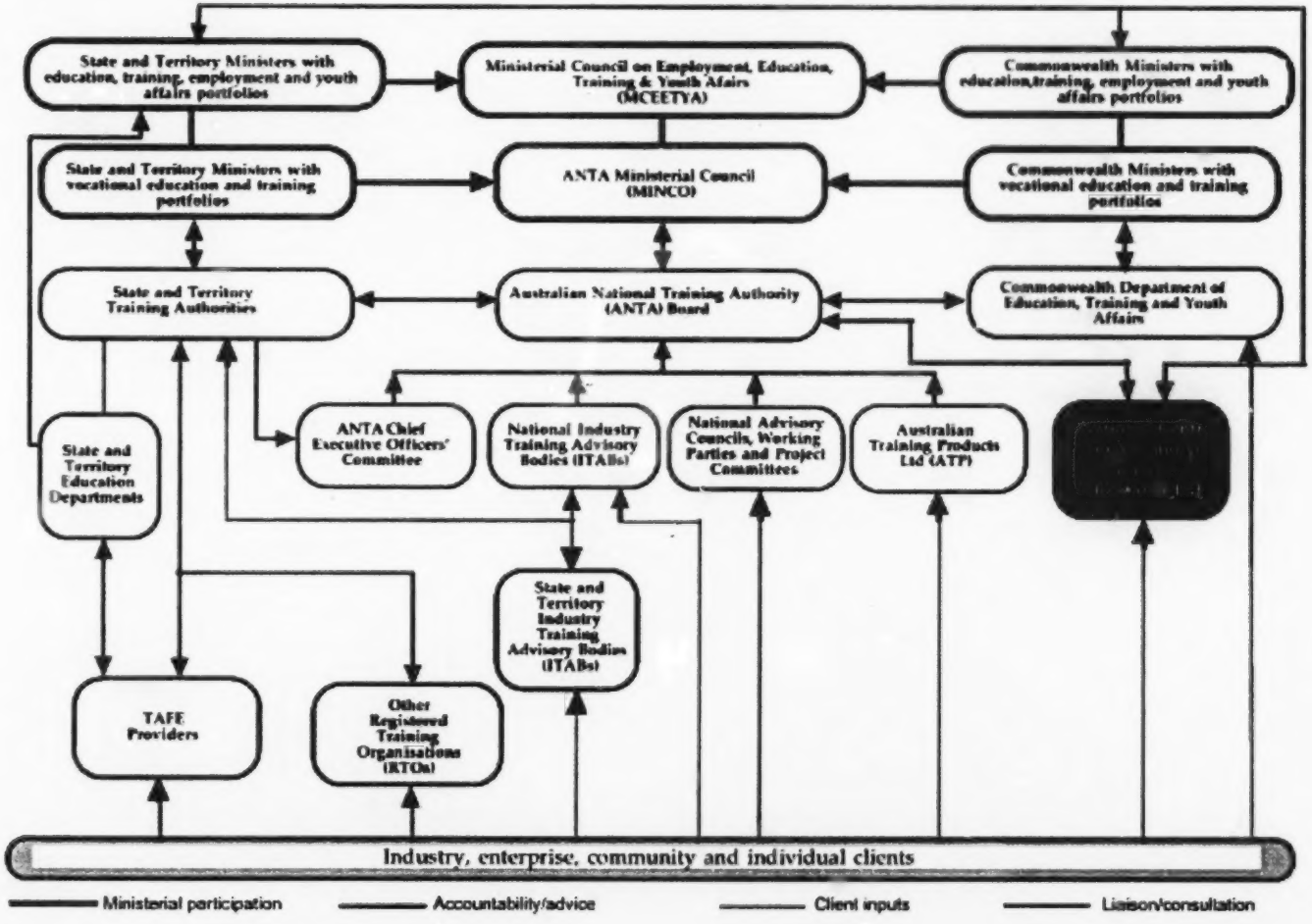
An important recent trend has been the combining of State and Territory departments for vocational education and training with State and Territory education departments, as part of the program to promote closer links between secondary education and vocational education and training and to deliver programs which combine education and vocational education and training to students who are still at school.

Australia has a highly developed set of industry training advisory bodies (ITABs) operating at both the national and State/Territory levels. ITABs provide advice on key training issues within a particular industry, and their boards are comprised of industry, business and labour union representatives. National ITABs receive financial support from ANTA to do a variety of things. Most important is to participate in national planning of the VET system and to develop national industry standards for training.

The National Centre for Vocational Education Research (NCVER) is the other major national government VET body in Australia. NCVER has responsibilities for developing and implementing Australia's national VET research and evaluation effort, together with the collection and reporting of national VET statistics. NCVER Limited is a non-profit company owned by Australian Ministers for Training.

Australia's governments have also established a non-profit company — called Australian Training Products Limited — to develop and publish national training products and materials.

Figure 1: The structure of Australian VET


State and Territory Ministers with education, training, employment and youth affairs portfolios
Ministerial Council on Employment, Education, Training & Youth Affairs (MCEETYA)
Commonwealth Ministers with education,training, employment and youth affairs portfolios
State and Territory Ministers with vocational education and training portfolios
ANTA Ministerial Council (MINCO)
Commonwealth Ministers with vocational education and training portfolios
State and Territory Training Authorities
Australian National Training Authority (ANTA) Board
Commonwealth Department of Education, Training and Youth Affairs
State and Territory Education Departments
ANTA Chief Executive Officers' Committee
National Industry Training Advisory Bodies (ITABs)
National Advisory Councils, Working Parties and Project Committees
Australian Training Products Ltd (ATP)
State and Territory Industry Training Advisory Bodies (ITABs)
TAFE Providers
Other Registered Training Organisations (RTOs)
Industry, enterprise, community and individual clients
Ministerial participation
Accountability/advice
Client inputs
Liaison/consultation

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There is also an array of other national advisory bodies and committees involved in the VET sector.

The roles and functions of the major organisations involved in VET in Australia are summarised in Table 1.

Table 1: Major organisations in the Australian vocational education and training system

Body or organisation	Acronym	Role and responsibilities
Ministerial Council for Employment, Education, Training and Youth Affairs	MCEETYA	National policy for all of employment, education, training and youth affairs
Ministerial Council for Vocational Education and Training	MINCO	National policy for vocational education and training
Department of Education, Training and Youth Affairs	DETYA	National policy advice, funding, strategic planning etc for education, training and youth affairs
Australian National Training Authority	ANTA	National policy advice, strategic planning etc for vocational education and training
State and Territory training boards and training authorities (eight)	Various	State/territory policy, planning, system management etc for vocational education and training
National industry training advisory boards	National ITABs	Identify and advise on training needs nationally for specific industries
State/territory industry training advisory boards	State/Territory ITABs	Identify and advise on training needs at state/territory level for specific industries
Australian Qualifications Framework Advisory Board	AQFAB	Maintains and reviews the Australian Qualifications Framework (AQF)
Australian Training Products Limited	ATP	Develops and publishes national training products and materials
National Centre for Vocational Education Research Ltd	NCVER	Key agency for vocational education and training research, evaluation, information and statistics at all levels

Source: NCVER

2.3 The providers of VET

In the past, vocational education and training in Australia was delivered exclusively by TAFE institutes, with overall strategic directions, planning and funding provided by State and Territory training authorities. In 1992 ANTA was established to ensure greater co-ordination of policy and planning in vocational education and training and to co-ordinate the distribution of national funding to States and Territories.

This means in Australia, vocational education and training programs are now delivered by a wide range of providers in both government and private sectors, as shown below (Table 2).

Table 2: Providers of vocational education and training in Australia, by sector

Government sector	Private Sector
Technical and Further Education (TAFE) institutes	Private providers not in receipt of government funds
Agricultural colleges	Private business colleges
Some higher education institutions	Enterprises providing training to their employees
Multi-sector providers and campuses	Suppliers providing training in product use
Some secondary schools	Unregistered community providers
Registered community providers	
Aboriginal education providers	
Private providers under contract to governments	

Source: NCVER

Today VET programs are provided by:

- around 100 TAFE or other government institutes (such as agricultural colleges providing VET programs) operating at some 1000 separate locations around Australia
- some 600 community education centres
- almost 1500 other registered training providers such as private training organisations, schools, business enterprises who provide formal training, special industry training centres, etc.

It is important to note that there are over 3500 registered training organisations in Australia, so not all of them are providing publicly funded VET programs in any one year.

Increasingly greater amounts of public VET funding are put up to competitive tendering amongst TAFE, community-based and private training providers.

2.4 The funding of VET

VET in Australia is funded from government and private sources (eg. companies purchasing training for their employees). Individuals also make a contribution through the payment of fees. Government funding of VET in Australia totalled $A4 billion per year in 1997 and 1998. Around 30% was provided by the national government, and the remainder by State and Territory (ie. provincial) governments. At the provider level specific allocations are made by government training authorities to TAFE institutes, other public training providers or a host of community and private training providers for them to provide VET training to industry and individual training clients.

The level of public funding of VET in Australia of $A4 billion represented almost 0.8% of total GDP in 1997. Australian governments spent around 5.7%of GDP on all forms of education and training (ie schooling, VET and universities) in 1994 (Lenahan, Burke and Hing Tong Ma 1998, p19).

3. Australian VET Participation and Outcomes

3.1 Participation in VET

The number of students/trainees in publicly funded VET programs in Australia has grown very strongly over the past decade. Ten years ago under one million people participated in VET in Australia, as shown in Table 3. Today over 1.5 million people are undertaking a publicly-funded VET program. This represents over 12% of the entire Australian population aged 15 to 64 years (ie the working age population).

Table 3: The number of VET students/trainees in Australia: 1988 to 1998

	Number in VET ('000)			
Year (a)	Males	Females	Persons	Proportion who are female (%)
1988	503.5	448.0	951.6	47.1
1989	492.7	439.6	932.6	47.1
1990	534.1	432.7	966.8	44.8
1991	541.1	444.8	985.9	45.1
1992	572.1	470.4	1042.5	45.1
1993	606.9	514.5	1121.4	45.9
1994	612.3	519.2	1131.5	45.9
1995	672.2	600.5	1272.7	47.2
1996	706.3	641.1	1347.4	47.6
1997	756.9	701.7	1458.6	48.1
1998	790.7	744.5	1535.2	48.5

Notes: (a) Minor changes were made to the collection arrangements or the scope of the series in 1993 and 1994. Moreover, community providers of VET were included since 1995 and private providers since 1996.

(b) Numbers who participated at some time throughout the calendar year.

Source: NCVER, 1998a

Most VET participants in Australia are part-time students. Half of all VET participants in 1998 were enrolled in programs of under 100 hours of training. Only around 10% of Australia's VET students are undertaking course as full-time full-year students.

As shown in Table 3 the proportion of female students/trainees in VET in Australia has now almost reached 50%.

The proportion of Australia's VET students/trainees who are school age students, early secondary school leavers or entry level trainees is relatively small. Only 20% of all VET students/trainees are under 20 years of age, although they account for one-third of the total training hours delivered (see Table 4).

Most VET participants are adults who are training or re-training for job related purposes. One quarter of all VET participants in Australia are over 40 years of age.

In fact, in Australia a VET student/trainee is far more likely to be an adult who is already employed and upgrading his or her job skills, than a young person who is studying in VET to gain an entry-level vocational qualification.

Australia is a highly urbanised country, yet around one-third of VET participants are undertaking their VET program outside of a major metropolitan area (as shown in Table 4).

Table 4: Characteristics of VET participants in Australia: 1997

Characteristic	Proportion of clients (%)	Proportion of total hours of training delivered (%)
Sex		
Male	51.9	52.6
Female	48.1	47.4
Total	**100.0**	**100.0**
Age		
Under 15 years	0.4	0.2
15-19 years	19.9	31.2
20-24 years	17.9	22.5
25-29 years	12.9	11.6
30-39 years	22.5	17.9
40-49 years	16.6	11.5
50-59 years	7.2	3.9
60-69 years	1.2	0.6
65 years and over	1.3	0.6
Total	**100.0**	**100.0**
Geographic region		
Capital city	58.6	61.7
Other metropolitan	7.1	7.5
Rural	29.6	25.1
Remote	3.5	2.7
Outside Australia	1.2	3.0
Total	**100.0**	**100.0**
TOTAL ('000)	**1458.6**	**302,199.6**

Source: NCVER 1998a

Australia has progressively improved its VET delivery to indigenous people, migrants and people whose first language is not English, to the point where such groups are equitably represented in the total VET student/trainee population. However, people with disabilities are still under-represented in VET.

This level of participation has resulted in Australian participation rates in VET being high. As mentioned earlier some 12% of the entire 15-64 year old population participated in VET in 1997. In terms of the different age groups, VET participation rates in 1997 were:

- nearly 20% for 15-19 year olds
- 17% for 20-24 year olds
- nearly 7% for 25-64 year olds.

This does not include participation in other forms of education such as in schools and universities. Estimates of total education participation rates in all forms of education and training in Australia in the relevant age cohorts in 1995 were that:

- the net primary school participation rate was 98%
- the net secondary school participation rate was 89%
- the tertiary (ie VET and university) participation rate of youth was 72% (Lenahan, Burke, Hing Tong Ma 1998, p22).

3.2 The amount and type of VET training provided

The total amount of publicly-funded training provided by the VET sector in Australia is shown in Table 5. The key features are:

- almost 1.5 million VET clients (ie students or trainees) enrolling in a VET program during 1997
- people enrolled in over 1.8 million VET courses during 1997, and between them they enrolled in almost 10 million VET modules
- over 300 million hours of training were delivered by the VET sector in 1997.

Table 5: Indicators of VET training activity in Australia: 1997

Indicator	Type of registered training organisation			
	TAFE & other government	Community education providers	Private providers & other	Total of all providers
Clients (ie students/ trainees)				
Number ('000)	1140.8	225.2	92.6	1458.6
Proportion (%)	78.2	15.4	6.4	100.0
Course enrolments				
Number ('000)	1451.1	291.6	99.6	1844.2
Proportion (%)	78.9	15.8	5.4	100.0
Module enrolments				
Number ('000)	8738.7	365.6	776.5	9880.7
Proportion (%)	88.4	3.7	7.9	100.0
Training hours delivered				
Number (million)	272.0	11.0	19.2	302.2
Proportion (%)	90.0	3.6	6.4	100.0

Source: NCVER 1998a

Some two-thirds of all training hours provided by VET in Australia were in just four fields of study, as shown in Table 6. These are:

- business, administration and economics courses account for almost 20% of total training hours in 1997
- TAFE multi-field education (ie general vocational education, languages and preparatory courses) with just over 17% of total training hours
- engineering and surveying courses with just under 17% of total VET training hours in 1997
- services, tourism and hospitality and transportation courses accounting for 12% of total training hours delivered in 1997.

Table 6: The amount of training provided in each field of study in Australia: 1997

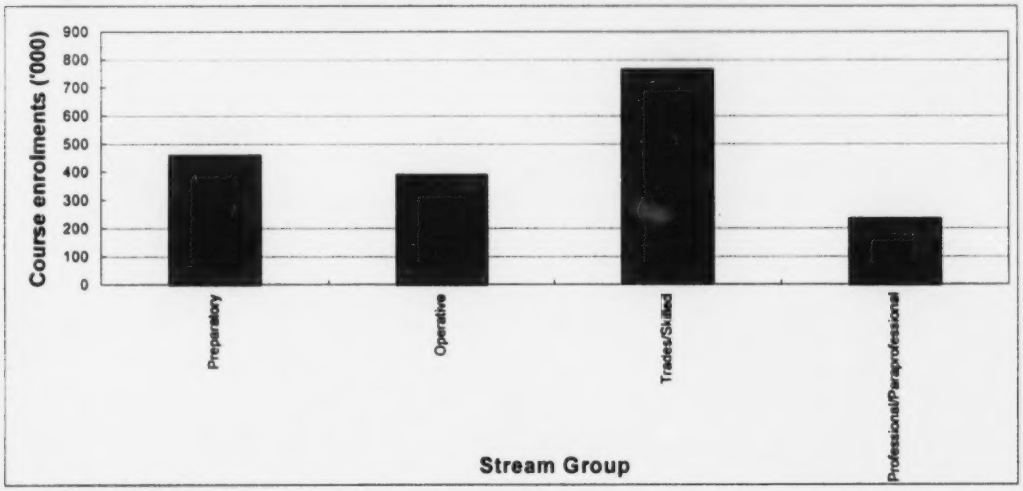
Field of study	Proportion of training hours provided (%)
Animal husbandry, land & marine resources	4.6
Architecture & building	6.5
Arts, humanities & social sciences	8.2
Business administration & economics	19.3
Education	1.3
Engineering & surveying	16.8
Health & community services	8.5
Law & legal studies	0.6
Science	4.5
Veterinary science & animal care	0.2
Services, hospitality & transport	12.1
TAFE multi-field education	17.4
Other	0.1
Total	100.0
TOTAL HOURS (million)	**302.2**

Source: NCVER 1998a

Somewhat similar patterns are observed when training activity is considered in terms of module enrolments in each discipline group, as shown in Table 7. Module discipline classifications in Table 7 describe the area of learning for each module undertaken independently from the course in which it is taken (noting the fields of study classification used earlier in Table 6 relates to a classification of VET courses undertaken).

One-fifth of all module enrolments are in the administration, business economics and law area. The other important areas of VET module enrolments are mathematics and computing (13.2%), engineering and processing (12.4%) and social, education and employment skills (12.3%). The overall pattern of VET taken in Australia can be summarised by referencing the information in Figure 2. Most enrolments are in the trades and skilled training area.

Figure 2: Course enrolments by type of VET study in Australia: 1997



Source: NCVER 1998a

Table 7: Module enrolments in each area of learning in Australia: 1997

Area of learning (ie discipline)	Proportion of module enrolments (%)
Humanities	7.2
Social studies	1.2
Education	1.3
Sciences	2.6
Mathematics & computing	13.2
Visual & performing arts	3.0
Engineering & processing	12.4
Health sciences	8.4
Administration, business, economics & law	20.2
Building & environment	4.5
Agriculture & renewable resources	4.2
Hospitality tourism & personnel services	9.5
Social, educational & employment skills	12.3
Total (%)	100.0
TOTAL ('000)	**9880.7**

Source: NCVER 1998a

Information about enrolments in courses leading to different qualifications levels in shown in Table 8.

The important point about the information in Table 8 is that only a little over half of all course enrolments in 1996 were in programs leading to a qualification. However, a further 16.5% of course enrolments were in programs leading to statements of attainment (issued to those partially completing a qualification and indicating the units of competency achieved under nationally endorsed competency standards) or certificates of competency or proficiency, etc.

The remaining enrolments (26.8% in 1996) were in non-award courses and courses not leading to a formally recognised qualification (or not leading to the issue of a statement of attainment, etc).

Table 8: Course enrolments by qualification level in Australia: 1996

Qualifications	Number of enrolments ('000)	Proportion of enrolments (%)
Full qualifications[a] still under old system		
Diploma	7.6	0.4
Associate Diploma	107.6	6.0
Advanced Certificate – post trade	9.7	0.6
Advanced Certificate – other	68.2	3.8
Certificate – trade	85.2	4.8
Certificate – n.e.c.	273.4	15.3
Sub-total in old system	551.7	30.9
Full qualifications[a] under AQF framework		
Advanced Diploma	28.4	1.6
Diploma	73.2	4.1
Certificate IV	69.0	3.9
Certificate III	130.7	7.3
Certificate II	99.0	5.5
Certificate I	54.8	3.1
Senior Secondary	6.2	0.3
Sub-total AQF	461.3	25.8
Sub-qualification level statements of attainment etc.		
Statements of Attainment	269.6	15.1
Certificates of Competency	20.0	1.1
Certificates of Proficiency	1.8	0.1
Endorsements to Certificates	3.3	0.2
Sub-total statements, etc.	294.7	16.5
Non-award/other	478.6	26.8
TOTAL COURSE ENROLMENTS	**1786.3**	**100.0**

Note: (a) Qualifications awarded or being sought

Source: Robinson 1998

3.3 Outputs and outcomes of VET

Some 65% of all modules undertaken in Australia's VET system in 1997 were completed successfully as shown in Table 9. This means that a pass or credit for prior learning or studies done elsewhere was achieved in over 90% of cases where modules were both completed and assessed.

The information in Table 9 also shows that just under 5% of all module enrolments culminated in a fail. Some 20% were not assessed or were enrolments in modules that continued past the end of the 1997 calender year.

Table 9: Assessment outcomes from participation in VET in Australia: 1997

Module Outcomes	Proportion of module enrolments (%)
Assessed and successful outcome gained	
Pass	59.2
Recognition of prior learning credit granted	2.3
Credit transfer granted for subjects completed elsewhere	3.3
Total successful	**64.8**
Assessed & successful outcome not gained	
Fail	4.9
Result withheld	2.2
Total unsuccessful	**6.1**
Not assessed	
Continuing in studies	5.0
Satisfactorily completed class hours but not assessed	5.7
Withdrew	8.8
Total not assessed	**19.5**
Outcome not reported	8.7
Total modules undertaken (%)	**100.0**
TOTAL MODULES UNDERTAKEN ('000)	**9880.7**

Source: NCVER 1998a

Another facet of the outputs from VET in Australia is the number of qualifications being issued. The number of qualifications reported as being issued in 1997 against the AQF or equivalent is shown in Table 10. The AQF is described fully in Section 5 of this paper.

Of the full VET qualifications awarded in Australia:

- only 15% were diplomas or advanced diplomas
- some 17% were Certificate IV level qualifications
- some 40% were Certificate III qualifications
- the remaining 28% were Certificate I and II level qualifications.

Table 10: VET Qualifications issued in Australia: 1997

Type of awards issued[a]	Number (1000)	Proportion (%)
Full qualifications awarded		
Diplomas and Advanced Diplomas	23.8	7.5
AQF Certificate IV & equivalent	27.2	8.6
AQF Certificate III & equivalent	68.5	21.6
AQF Certificate I or II & equivalent	36.5	11.5
Total Full Qualifications	**156.0**	**49.2**
Sub Qualification Level		
Other certificates and endorsements	12.4	3.9
Statements of attainment	65.8	20.7
Statements from courses of less than 50 hours duration	83.3	26.2
Total sub qualification certificates/statements	**161.5**	**50.8**
TOTAL AWARDS ISSUED	**317.5**	**100.0**

Note: (a) Awards reported as being issued

Source: NCVER 1998a

It is important to note that the above qualifications data are incomplete because not all awards issued are reported or because not everyone who is eligible for an award issued with one. Arrangements to improve awarding practices and reporting are currently under review in Australia.

The most important outcome from VET participation is an employment outcome. After all most VET students in Australia cite a job-related reason as the main reason for undertaking VET in the first place. For example the results of NCVER's *1997 TAFE Graduate Destination Survey* show that the main reasons graduates gave for undertaking a TAFE course in 1996 were:

- to get a job or start a business (28.8%)
- for interest or personal development (13.6%)
- to get extra skills for an existing job (13.1%)
- to try for a different career (12.3%)
- to get a better job or promotion (12.0%)
- it was a requirement of any job (10.5%)
- to get into another course of study (6.4%)
- other reasons (2.5%).

The same survey traced the employment status of graduates as at May 1997, who had earlier undertook their VET study and graduate sometime, during 1996. As shown in Table 11 some 71% of graduates had obtained employment by 30 May 1997. Most were in full time jobs. The employment outcomes were better for males, with 78% having jobs, than for females, with only 66% having jobs.

Table 11: Employment outcomes of TAFE graduates in Australia: 1997

Labour Force Status at 30 May 1997	TAFE Graduates who graduated during 1996 (%)		
	Males	Females	Total
Employed			
Full Time	63.4	34.8	47.3
Part Time	10.6	26.8	19.7
Employed but type not stated	3.7	4.2	4.0
Total	**77.7**	**65.8**	**71.0**
Unemployed			
Seeking full time work	10.8	10.3	10.5
Seeking part-time work	2.4	6.3	4.6
Total	**13.2**	**16.6**	**15.1**
Not in the labour force	9.5	17.6	13.9
TOTAL	**100.0**	**100.0**	**100.0**

Source: NCVER 1997a

The survey also shows some 15% were unemployed and looking for full-time or part-time work, and just under 14% were not in the labour force (ie neither employed or actively looking for a job).

Of course not all graduates were unemployed at the time of commencing their course. Some 36% had a full-time job before commencing their course, noting that rate rose to over 47% after graduation. Similarly, some 25% had part-time jobs before commencing their courses. The part-time employment rate fell to 20% after graduation.

These results show there are two key aspects of the employment outcomes being obtained from VET in Australia. These are:

- a significant improvement in overall employment outcomes arises from successfully completing a significant VET course
- an even greater conversion from part-time to full-time work arises as a result of such VET study.

Another feature of the outcomes from VET in Australia concerns the satisfaction of employers with the training provided, and the impact that such training has had on business productivity.

As shown in Table 12, some 78% of all employers of VET graduates in Australia are satisfied or very satisfied with the VET training provided. Large enterprises with 100 or more employees are slightly more satisfied than are employers running medium or small sized enterprises. Yet the level of satisfaction varies only marginally with the size of the business.

Table 12: Employer satisfaction with VET in Australia: 1997

Satisfied or very satisfied with VET training provided	Proportion of employers (%)
Large enterprises (100 + employees)	84
Medium enterprises (20-99 employees)	80
Small enterprises (1-19 employees)	77
ALL EMPLOYERS	**78**

Source: NCVER 1997b

Another critical finding from the NCVER's Employer Satisfaction Survey is that nearly three quarters of employers in Australia who have employed a VET graduate within the last two years have reported an increase in productivity that they attribute to the skills received from VET.

3.4 The apprenticeship and traineeship system

A very significant feature of Australia's VET system is the apprenticeship and traineeship system. The apprenticeship system has been in place in one form or another since 1805 in Australia, having developed from the British system of indentured apprentices that has operated for hundreds of years.

Traditionally, apprenticeships in Australia involved people under 20 years of age, 4 years in a training contract, typically with one day per week off-the-job training in TAFE college or other VET provider and 4 days per week training on-the-job. Apprenticeships were restricted to certain trade-based occupations, largely in the manufacturing, building and construction, printing and hairdressing areas. Apprentices are paid lower wages than are fully qualified and skilled tradespersons in the same field.

In 1985 Australia introduced a new form of structured training for young people called traineeships. The intention was to expand structured training for young people to a range of new industry areas not covered by traditional apprenticeships such as agriculture, horticulture, manufacturing utilities and transport and storage. More recently areas such as sales in retailing and tourism and hospitality have become more important.

Like apprenticeships, traineeships involved one day, or sometimes two days, per week off-the-job. Trainees are paid lower wages than fully trained adult workers already trained and working in the same areas.

The number of apprentices and trainees in a contract of training with an employer reached record levels of over 256,000 by June 1999. Such training has grown from under 130,000 in 1985 (as shown in Table 13).

Table 13: Apprentices and trainees in Australia: 1985 to 1999

30 June	Number in training contracts ('000)		
	Apprentices	Trainees	Total
1985	128.6	0.0	128.6
1986	130.4	1.0	131.4
1987	138.9	6.4	145.3
1988	147.1	9.2	156.3
1989	151.7	12.2	163.9
1990	161.0	11.8	172.8
1991	151.0	9.2	160.2
1992	142.9	9.0	151.9
1993	122.7	14.8	137.5
1994	123.3	7.8	131.1
1995	122.9	12.0	135.8(a)
1996	124.4	29.7	158.0(a)
1997	123.1	47.8	175.4(a)
1998	na	na	194.2
1999	na	na	256.5

Notes: (a) From 1995 to 1997 some contracts of training cannot be identified as apprentices or trainees. These are included in the totals only

Sources: NCVER 1998b and 1998c, and unpublished NCVER data

The key features of this trend are:

- a rapid growth in the 4 year apprenticeships from 1985 to the early 1990s
- an equally rapid decline in apprenticeship members from the early to the mid-1990s, with numbers in training at 30 June stabilising since 1993 at around 123,000 to 125,000
- a major expansion in shorter traineeships since the mid-1990s

Another important development has been the removal of any age barriers to participation in apprenticeships and traineeships over the last decade or so. Today only 44% of apprentices/trainees are under 20 years of age. Around one-quarter are more than 25 years of age, as shown in Table 14.

Table 14: Characteristics of apprentices and trainees in Australia: 1997

Age Group	Number in training[(a)] Contracts ('000)			Proportion of age cohort (%)		
	Males	Females	Persons	Males	Females	Persons
15-19 years	60.7	16.9	77.6	9.1	2.7	6.0
20-24 years	58.2	12.8	71.0	8.3	1.9	5.2
25-29 years	9.1	2.9	12.0	1.2	0.4	0.8
30-64 years	9.6	5.2	14.8	0.2	0.1	0.2
TOTAL 15-64 years	**137.6**	**37.8**	**175.4**	**na**	**na**	**1.4**

Note: (a) Number in training on 30 June 1997

na - Not available

Sources: NCVER 1998b and 1998c

The other important issue with the development of Australia's apprenticeship and traineeship system is the shift that has occurred in the type of occupations that apprentices and trainees are engaged in, particularly in the last decade.

As shown in Table 15, some of the traditional trades areas in the metal trades, manufacturing, building and electrical areas, have declined in relative importance. The shifts in the patterns of apprenticeship/traineeship training have in large part followed changes in the occupational structure of the Australian labour market as a whole.

Table 15: Occupational categories of apprentices and trainees in Australia: 1985 and 1997

Occupation	November ('000)[a]		Proportion (%)	
	1985	1997	1985	1997
Managers and administrators	0	1.8	0	1.0
Professionals	0	0.2	0	0.1
Para-professionals	0	3.2	0	1.8
Metal trades	44.5	21.4	34.6	12.2
Electrical	18.3	16.8	14.2	9.6
Building	21.9	24.3	17.1	13.8
Printing	3.4	3.2	2.6	1.8
Vehicle trades	6.0	21.2	4.7	12.1
Food	11.0	17.1	8.6	9.8
Horticulture	(b)	3.2	(b)	1.8
Hairdressing	(b)	9.7	(b)	5.5
Clerks	0	13.9	0	7.9
Salespersons & personal services	0	16.8	0	9.6
Plant & machine operators & drivers	0	2.2	0	1.3
Labourers & related workers	0	12.9	0	7.4
Miscellaneous/other	23.5	7.5	18.2	4.3
TOTAL	**128.6**	**175.4**	**100.0**	**100.0**

Notes: (a) Numbers in training contracts on 30 June 1997

(b) Horticulture and Hairdressing were counted in the miscellaneous category in 1995

Sources: NCVER 1998b and 1998c

The most recent development of this system of training in Australia is the establishment of New Apprenticeships on 1 January 1998. The New Apprenticeships system covers all former apprenticeships and traineeship arrangements, and does away with the distinction that formerly existed between apprenticeships and traineeships.

There are now no restrictions on the occupations covered. Flexible, rather than fixed amounts of on-the-job and off-the-job training can now be provided according to employer and trainee requirements. Other important features of the New Apprenticeship system include:

- 'user choice', where employers can select their own vocational education and training provider for the formal (ie off-the-job) component
- the option of undertaking the formal part of the training entirely in the workplace
- allowing training contracts to apply to part-time as well as full-time employment situations
- the option of commencing the training program while still at school
- subsidies and incentive programs to employers to encourage them to take on New Apprentices, to encourage training at higher skill levels (as measured by the level in AQF), and for successful completion of the training program.

The development of user choice arrangements in New Apprenticeships has been a particularly important new development.

These arrangements were put in place to allow more discretion for individual clients and their employers who had entered into a contract of training (apprenticeship, traineeship) to select their own training provider. Under these arrangements public funds flow to those registered training providers who had been chosen by employers and trainees to deliver the training. Under user choice arrangements employers and trainees may also choose how the traineeships will be

delivered. They may opt for training to occur totally on the job or to choose a mixture of on and off-the-job training.

Although New Apprenticeships are an important part of the Australian vocational education and training system, and in 1999 approximately 6% of young people were employed under an apprenticeship or traineeship, the importance of this mode of training should not be overstated. For example, in recent years the number of Australians involved in an apprenticeship or traineeship in a year is only about 20% of the number who undertake vocational education and training with providers in receipt of public funds.

4. Employer investment in training in Australia

In addition to the formal VET system described above, employers in Australia spend an estimated $A4.7 billion per year in providing training to their employees. Only a small proportion of this training is thought to be under the formal VET system.

As shown in Table 16 over 60% of all employers in Australia reported the provision of some kind of structured or unstructured training to their employees during the year ending February 1997.

According to the Australian Bureau of Statistics (ABS) structured training refers to:

> "...all training activities which have a predetermined plan and format designed to develop employment-related skills and competencies. It consists of periods of instruction, or a combination of instruction and monitored practical work. The instruction can take the form of workshops, demonstration sessions or monitored self-paced training packages. It can also include structured on-the-job training" (ABS 1998, p66).

Unstructured training refers to:

> "...training activity that does not have a specific content or predetermined plan. It includes unplanned training that is provided as the need arises and training activity that is not monitored such as self training through reading manuals or using self-training computer packages" (ABS 1998, p66).

Table 16: Employer provision of structured training in the last 12 months by enterprise size in Australia: 1997

Enterprise size	Proportion of employers who provided structured and/or unstructured training (%)	Proportion of employers who provided structured training (%)
Small business sector		
1-4 employees	45	20
5-9 employees	74	43
10-19 employees	86	60
Total small business (1-19 employees)	57	30
Medium enterprises		
20-99 employees	94	71
Large enterprises		
100 or more employees	99	94
All employers	**61**	**35**

Source: Australian Bureau of Statistics 1998

The provision of structured or unstructured training by employers is widespread in medium and large enterprises in Australia. Virtually all large enterprises (ie with more than 100 employees) provide some kind of training to the workforce, and some 94 per cent of medium-sized enterprises (ie with 20-99 employees) do likewise (as shown in Table 16). However, these enterprises account for only 10% of Australia's enterprises (large enterprises being 2% of all enterprises and medium sized enterprises being 8%).

The small business sector (ie 1-19 employees) accounts for some 90% of all enterprises in Australia. In this sector only a little over half of all small business reported an involvement in some kind of structured or unstructured training during the year ending February 1997 (as shown in Table 16).

The smaller the business, the less likely it is that training (either structured or unstructured) will be provided. As shown in Table 16 only 45% of employers in very small enterprises (with a workforce of 1-4 people) report an involvement in training. These enterprises make up 63% of the small business sector.

Some three-quarters of small enterprises with 5-9 employees provide training to their workforce. These enterprises account for 26% of the small business sector (see Table 16).

Only 14% of enterprises in the small business sector have a workforce in the 10-19 employee range, and 86% of these enterprises provide training to their employees (see Table 16).

In terms of the provision of some kind of structured or unstructured training, a widespread training culture can be said to exist in medium to large-sized enterprises in Australia. However, the pattern is rather different in the small business sector, which accounts for 90% of all Australia's enterprises, particularly in those enterprises with fewer than 5 employees, which dominate the sector.

The provision of structured training by employers gives a better indication of the level of commitment to training amongst Australia's enterprises. Structured training represents a significantly more intensive level of skill formation activity, than simply considering all training activity which includes unstructured training.

Some 35% of employers provided structured training to their employees in the 12 months ending February 1997 as shown in Table 16. However, this masks the very different patterns of structured training provision in different sized enterprises. The overwhelming majority of large enterprises (94%) not only provide training but also provide structured training to employees. This indicates a substantial commitment to training in Australian, by the corporate sector, and amongst large public sector organisations.

Similarly over 70% of all medium-sized enterprises provide structured training to their employees (Table 16).

Only 30% of small business enterprises are involved in providing structured training to their employees. As shown in Table 16, considerable variation occurs within the small business sector itself, with only 20% of enterprises with 1-4 employees being involved in structured training, whereas 60% of enterprises with 10-19 employees provide structured training to their employees.

There are also variations across industries as shown in Table 17. The government administration and defence industry stands out as one where virtually all enterprises provide structured or unstructured training to their employees. Other industries with a much better than average proportion of enterprises providing training are electricity, gas and water; education; and personal and other services.

Industries that have proportions of enterprises providing training that are near or just above the Australia-wide average for all industries are Manufacturing; Health and community services; Finance and insurance; Wholesale trade; Retail trade; and Property and business services.

Those industries well below the industry average are Culture and recreational services; Mining; Communication services; and Accommodation, cafes and restaurants.

The Transport and storage and Construction industries are the only industries where fewer than half of all enterprises provide structured or unstructured training to their employees.

These variations suggest some clear patterns concerning industry's commitment to training and a training culture. Those industries with a high proportion of large enterprises or public sector enterprises appear to have an "ingrained training culture". On the other hand there appears to be

a much lower commitment to training in industries with a high proportion of small firms or where there are higher proportions of casual or sub-contracted labour.

Table 17: Employers providing structured and/or unstructured training in the last 12 months by industry in Australia: 1997

Industry	Employers providing training (%)	Employers not providing training (%)	All employers (%)
Mining	54	46	100
Manufacturing	68	32	100
Electricity, gas & water	87	13	100
Construction	47	53	100
Wholesale trade	61	39	100
Retail trade	60	40	100
Accommodation, cafes & restaurants	55	45	100
Transport & storage	43	57	100
Communication services	54	46	100
Finance & insurance	68	32	100
Property & business services	60	40	100
Government, administration & defence	99	1	100
Education	76	24	100
Health & community services	68	32	100
Cultural & recreational services	50	50	100
Personal & other services	78	22	100
ALL EMPLOYERS	**61**	**39**	**100**

Source: Australian Bureau of Statistics 1998

Turning to employer expenditure on training, employers in Australia spent $A1178.8 million on structured training during the 1996 September quarter as shown in Table 18. These results are from ABS surveys of employers' training expenditure patterns for the period July to September 1996. Full year training expenditure figures are not available. However, if we extrapolate the survey results to the whole of 1996, then some $A4.7 billion was spent by employers on structured training in 1996.

Table 18: The components of employer expenditure on structured training in Australia: September quarter 1996

Item	Actual ($A million)	Proportion (%).
Employee's wages and salaries for time receiving training	549.2	46.6
Cost of wages and salaries of in-house trainers	271.9	23.1
Fees paid to consultants and other institutions	204.2	17.3
Other expenditure such as training materials, equipment, travel, accommodation and meals, training venues, payments to industry training bodies	153.4	13.0
TOTAL STRUCTURED TRAINING EXPENDITURE	**1178.8**	**100.0**

Source: Australian Bureau of Statistics 1997

Just under 47% of the total expenditure on structured training by employers was for the wages and salaries of their employees for the time they were receiving structured training. The cost of paying fees to trainers accounted for a further 40% of the total spent by employers on structured training. The remaining 13% of the total cost of structured training met by employers was for other items such as training equipment and materials, training venues, accommodation and travel (Table 18).

In terms of total training expenditure, almost 70% was spent on training conducted in-house. Only 30% was conducted by external consultants or training institutions such as TAFE institutes.

This expenditure provided an average of $A185 per employee being spent on structured training by employers during the July to September 1996 period, accounting for an average of almost 5 hours of structured training per employee during the three-month period (Table 19). The $A1.179 billion spent by employers on structured training during the September quarter of 1996 amounted to 2.5% of the total payroll for the period.

Table 19: Measures of employer provision of structured training in Australia: September quarter 1996

Indicator	
Total training expenditure ($A billion)	1.179
Expenditure per employee ($A)	185.0
Training per employee (hours)	4.9
Employers providing structured training (%)	17.8
Proportion of payroll spent on structured training (%)	2.5

Source: Australian Bureau of Statistics 1997

The really critical issue with respect to the patterns of employer expenditure on structured training is the different patterns between small, medium and large employers (Table 20). Large companies and public sector agencies (with at least 100 employees) spent almost four times as much per employee on structured training than did small enterprises (with less than 20 employees). Large employers spent nearly twice as much per employee on training than medium-sized organisations (with 10-99 employees).

Only 13% of small employers spent money on training for their employees during the September quarter of 1996, whereas 50% of medium-sized employers and nearly 90% of all large employers provided expenditure for structured training during September quarter of 1996 (Table 20).

Table 20: Measures of employer expenditure on structured training by enterprise size in Australia: September quarter 1996

Indicator	Less than 20 employees	20-99 employees	100 or more employees	All employers
Total training expenditure ($A million)	115.0	168.4	895.4	1178.8
Expenditure per employee ($)	71.0	136.0	256.0	185.0
Training per employee (hours)	2.4	3.8	6.5	4.9
Proportion of employers providing training (%)	13.4	50.5	88.3	17.8
Proportion of total payroll spent on structured training (%)	1.2	1.9	3.2	2.5

Source: Australian Bureau of Statistics 1997

5. The development of national training packages

A decision was taken in the mid-1990s to develop a series of national training packages aimed at covering most industries and types of training activity in Australia's VET system.

This decision was taken to give industry itself (ie business and the representatives and other industry organisations) a greater say in what competencies ought to be covered in training programs at different levels in each industry. It was felt that in order to better meet the needs of industry, the opportunity should be given to industry training organisations and other stakeholders to participate in the development of training packages that incorporate competency standards, qualifications and ways of measuring skills into one package or formal document. This package is called a national training package. It describes competencies, assessment guidelines and qualifications for a particular industry or enterprise. These components must be endorsed. It may also include non-endorsed components which describe learning strategies, assessment resources and professional development materials.

In a sense, national training packages are frameworks or training "roadmaps". They do not specify detailed training program contexts or curriculum.

ITABs have been very major players in the development of national training packages. This has been a significant part of their broader role to provide an input to the planning and development of training in their industry sector through providing inputs to industry training profiles. ITABs do not, however, have a "training purchaser" or direct funding role.

By March 2000 there were 51 formally endorsed national training packages (ANTA 2000). These comprised 47 industry packages and 4 enterprise packages. According to ANTA they covered about 85% of Australian industry. At the time of writing there were another 15 training packages that were waiting to be endorsed. The packages that have been endorsed have been grouped according to industry sectors in Table 21.

Table 21: Training Packages endorsed by November 1999

Industry Sector	Endorsed Training Package
Agriculture, Forestry and Fishing	Agriculture
	Forestry and Forest Products
	Horticulture
	Veterinary Nursing
Mining	Black Coal
	Extractive Industries
	Drilling
Manufacturing	Manufactured Mineral Products
	Metal and Engineering
	Plastics, Rubber and Cable-making
	Meat
	Food
	Seafood
	Pulp and Paper
	Chemical, Hydrocarbons and oil refining

Electricity, Gas and Water Supply	Electro-technology
	Utilities - Gas sector
	Utilities – Generation Sector
	Utilities - Water Sector
	Utilities – Transmission Sector
Construction	Civil Construction
	General Construction
	Woolworths (enterprise)
Wholesale and Retail Trade	Retail
Accommodation, Cafe & Restaurant	Hospitality
	Caravan
Transport and Storage	Transport and Distribution
	Aeroskills
	Automotive Retail Service and Repair
Communication Services	Telecommunications
	Information Technology
	Museum and Library Information Services
	Printing and Graphic Arts Industry
Finance and Insurance	Financial Services
Property and Business Services	Asset Maintenance
	Asset Security
	Service Technician Portable Fire Equipment (Chubb Fire – enterprise)
	Administration
	Lifts
Government Administration and Defence	Public Services
	Correctional Services
Education	Assessment and Workplace Training
Health and Community Services	Community Services
Cultural and Recreational Services	Entertainment Industry
	Outdoor Recreation
	P & O Ports (enterprise)
	Racing
	Sports
	Tourism
Personal and Other Services	Beauty
	Floristry
Cross Industry Training Package	Laboratory Operations

Source: Australian National Training Authority, 2000

6. The VET certification system in Australia

6.1 The Australian Qualifications Framework

People can enrol in a VET program simply to gain skills from one or more modules (i.e. subjects/short courses) or they can undertake a full program leading to a certificate or diploma qualification.

In Australia there are six different core VET qualifications being offered under a new comprehensive national system of education and training qualifications—the AQF. They are shown in Table 22. A seventh qualification, the senior secondary certificate, is also offered by some TAFEs. The AQF was first introduced in 1995 and has been progressively phased in over a five-year period ending 31 December 1999.

The AQF was designed to provide consistent recognition of the outcomes achieved from education and training across all sectors of senior secondary schooling and universities. The AQF includes recognition of the integration of learning in the workplace with the incorporation of structured training into the system (with apprenticeships and traineeships being Certificates I to IV under the AQF). Moreover, the AQF was designed to provide a clear and rational structure in which an increasingly deregulated training market can operate while maintaining credibility within the overall education and training system.

Table 22: The Australian Qualifications Framework (AQF)

Schools sector	VET sector	Higher education sector (ie university)
		Doctoral degree
		Masters degree
		Graduate diploma
		Bachelor degree
	Advanced diploma	Advanced diploma
	Diploma	Diploma
	Certificate IV	
	Certificate III	
	Certificate II	
Senior Secondary Certificate of Education	Certificate I	
	Statement of attainment (part qualification)	

Source: Australian Qualifications Framework Advisory Board 1999 and 1996

The AQF qualifications can be attained in various ways. These include:

- through the classroom in a TAFE or other registered VET provider as a full or part-time student
- in the workplace through a structured training program
- in an industry training centre
- 'off-campus' modes such as open or distance learning
- various combinations of the above.

The AQF system in the VET sector is designed around a set of competency standards that need to be achieved in different training programs, rather than qualifications being set according to the amount of time taken to undertake a course of study. Thus, different people will take different amounts of time to complete any given VET qualification. Nevertheless, the typical intensity of each AQF qualification is as follows:

- Certificate I and Certificate II programs to be the equivalent of around half a year of full-time study to complete
- Certificate III and Certificate IV programs typically take the equivalent of one year of full-time study to complete
- Diploma and Advanced Diploma programs typically involve the equivalent of two years of full-time study, although some programs involve the equivalent of three years of full-time study.

Students who successfully complete the requirements of a recognised course or training package qualification with a registered training organisation are entitled to a certificate or diploma under the AQF confirming this. Status or credit for subjects or units of competency completed with another training provider, or through recognition of prior learning, should be taken into account when determining entitlement to a recognised qualification. In most instances the certificate is issued by the registered training organisation on application by the student.

Students who have successfully completed one or more subjects or training-package units of competency with a registered training organisation are also entitled to formal certification of their achievement. This is usually provided in the form of a statement of attainment.

Standards for units of competency are specified in national training packages, while for subjects which form part of national courses the standards are specified in curriculum documentation. Teaching staff are required to follow these standards when assessing their students. The use of externally set examinations was once widespread in the TAFE sector (the major provider of vocational education and training) but has been largely superseded by local assessment arrangements, which may be tailored to meet the needs of students and employers while still maintaining the specified standards for competency.

Under the Australian Recognition Framework quality assurance is a responsibility of State and Territory training authorities, and quality assurance requirements are included in the criteria which each training provider must meet. Although external checking of standards is not a major feature of the certification system, feedback from employers via the regular employer satisfaction survey conducted by the NCVER does not indicate any widespread dissatisfaction with standards or with the certification issued to students.

6.2 Accreditation of VET in Australia

A fundamental feature of the Australian vocational education and training system is that training programs which lead to the awarding of recognised qualifications must be accredited. In the past this accreditation was generally given at the State or Territory level via accreditation boards established by the State or Territory training authorities. Occasionally, training programs were also developed and approved at a local level by TAFE institutes.

Since the early 1990s, however, arrangements have been made to ensure that all courses and subjects accredited by the State and Territory training authorities are available for use and formally recognised throughout the whole country. Accreditation under these arrangements was usually for a period of five years, and national courses and modules (ie subjects) were listed on a national register. However, these arrangements are now being replaced by a system of national training packages, which are designed to meet industry requirements and are approved at national rather than State or Territory level.

As noted previously, an important change took effect on 1 January 1998 with the introduction of the Australian Recognition Framework (ARF). These new arrangements involved moving the

emphasis to the registration of training organisations (RTOs), with associated quality assurance requirements. These arrangements, in conjunction with the implementation of national training packages, will eventually replace the system where each training course was assessed for national accreditation. Moreover, it is expected that the majority of national courses will be replaced eventually by programs structured around nationally endorsed training packages.

However, since training packages are industry-specific, not all vocational education and training activity will necessarily be covered by national training packages. In particular, many general education programs, pre-vocational programs, and programs which are designed as preparation for vocational education and training, may not be covered by national training packages.

In national training packages the focus of training is on outputs, specified in terms of qualifications and units of competency, which are the building blocks of qualifications. The training packages are developed under the supervision of industry training advisory boards and submitted to a national recognition body for approval. Once approved they are published and distributed by Australian Training Products.

Details of national training packages are placed on the National Training Information System (NTIS), an electronic resource which can be accessed via the internet. It includes details of the registered training organisations which are approved to conduct each training program and issue qualifications. The NTIS replaces the former National Register of courses and modules. However, to facilitate the transition to the new arrangements the NTIS also includes listings of those national courses which are still current.

Training package qualifications and units of competency are recognised nationally. Moreover, the new arrangements enable students to move more freely among RTOs and even to undertake one part of a qualification with one RTO and the remainder with another. These possibilities are important in a country as physically large as Australia, where students or workers sometimes travel great distances to undertake their training or to take up employment.

Quality assurance is generally the responsibility of State and Territory training organisations, who have overall responsibility for the management and delivery of publicly-funded training programs and for monitoring the issuing of recognised qualification by non-government organisations. Quality assurance requirements are included in the registration requirements for all RTOs, both government and non-government.

For training providers and students, there are a number of important advantages favouring accredited programs:

- they allow recognised qualifications or statements of attainment to be awarded, facilitating flexibility and portability
- public funding is only provided for accredited programs. This is important for non-government providers who tender on a competitive basis for public funds, while for students, undertaking an accredited, publicly-funded program generally means lower fees
- under the arrangements for the Goods and Services Tax (GST), which were implemented on 1 July 2000, fees charged for accredited vocational education and training programs are exempt from the GST, but non-accredited programs are subject to GST.

Finally, it should be noted that much of the training undertaken in the private sector and by employees takes the form of short, specific-purpose programs for a particular student group. The majority of this training falls outside the arrangements for formally accredited programs but is none-the-less important in Australia's total training effort.

6.3 Accreditation of VET providers in Australia

Accreditation of vocational education and training providers is now covered by the ARF, which was implemented from 1 January 1998. Under these arrangements accreditation of both public (ie government) and private (ie non-government) providers is covered by a single framework.

Before 1998, separate arrangements existed for public and private providers of vocational education and training:

- for public providers, no formal registration or quality assurance requirements existed as these providers were established under government legislation or regulations. However, many TAFE institutes were subject to the requirements specified in performance agreements with State and Territory training authorities, and many also sought and obtained endorsement as quality-endorsed organisations under the International Standards Organisation (ISO) 9000 series standards
- registration requirements existed for private and community providers. The specific requirements varied among the State and Territory training authorities. However, in all cases registration requirements had to be met before a provider could receive public funds.

A number of State and Territory training authorities continue to use performance agreements as a means of managing delivery by public providers and to ensure accountability. These performance agreements specify, among other things, the amount and type of vocational education and training to be delivered, the amount of money which will be paid for the delivery and in some cases include output targets with associated payment provisions.

When private providers receive public funds to deliver training the State or Territory training authority enters into a formal contract with the provider

For private providers, the advantages of being an RTO are:

- it allows the provider to bid for and receive public funds to deliver vocational education and training programs
- it allows the provider to issue nationally recognised qualifications, making the programs offered by the provider more attractive to the would-be students
- under the user-choice arrangements for New Apprenticeship, it allows the provider to deliver or supervise the formal component of the training of New Apprentices, and to receive payment for this service.

7. Some key features of the Australian VET system

In this section the key features of the Australian VET system are examined.

7.1 A clear national policy for VET

The Australian experience suggests that having a clear national policy statement is an essential ingredient in any consistent national development of the vocational education and training system. Agreement was recently reached amongst Australian ministers for training over a new national policy statement for the next five years. The policy issued by the ANTA — *A bridge to the future: Australia's national strategy for vocational education and training 1998-2003* — outlines:

- a national mission statement for the VET sector
- five key national objectives for VET in Australia to underpin the mission statement
- a set of national strategies and agreed processes to achieve each of the objectives
- national monitoring arrangements, including the adoption of seven key performance measures through which to gauge progress in implementing the national VET policy (ANTA 1998a).

This is the third such national VET strategy in Australia. However, the strategy document is not the key issue. Rather it is the process embarked upon to gain widespread consensus about what the key objectives for VET ought to be that is important.

Essential elements of any successful national framework for VET need to include:

- widespread consultations about the appropriate direction to take that goes well beyond discussions amongst various government officials or colleges and other training providers
- extensive discussions with the clients of the training system, these being industry representatives and students and trainees
- a consideration of the key issues that are separate from the development of other education policies for schooling or universities so that the work-related nature of VET can be kept fully prominent
- the framing of national objectives for VET that are capable of being measured/monitored so that progress can be reviewed.

7.2 Moving towards lifelong learning

Australia has developed a VET system which is very broad in its coverage and scope. Over 1.5 million Australians or 12% of the entire working age population (ie 15-64 years of age) enrol in a publicly funded VET program each year. Nearly two-thirds of those who enrol in VET in Australia each year are now over 25 years of age. Moreover, most enterprises in Australia with more than 10 employees provide some kind of training to their employees. While there is still much to be done in Australia to improve the scope, coverage, quality and relevance of VET, the notion that skills learning and re-learning must continue throughout one's lifetime is gradually becoming an ingrained feature of Australia's economic, social and cultural landscape.

It is no longer sufficient to have a VET system that is mainly focussed on preparation of youth for entry to the workforce. There are two key reasons for this:

- first, on the *demand* side, technological change and other changes stemming from globalisation of economies around the world are now so rapid that people cannot expect to work in the same areas over a lifetime. Even within a work area changes are occurring continuously
- second, on the *supply* side, the workforces of most countries are ageing. There will be relatively fewer young people in the workforce than in the past. Skill formation policies must, therefore, also be focussed on the adult workforce.

7.3 Developing advanced and high-level skills training

A feature of the Australian VET system is the diversity and comprehensiveness of its coverage from short programs of training through to intensive advanced VET programs across a wide range of skill areas. Over one-third of the total hours of training delivery in VET each year are advanced level courses (ie Diploma, Advance Diploma and Certificate IV programs).

Moreover, a majority of apprentices and trainees undertake a program at AQF level III or higher.

Advanced and high level skills training is particularly important for high technology industries.

7.4 Competency-based training

Australia has been developing and implementing a competency-based training system for the past decade or more. Competency-based training is probably the most critical feature that distinguishes the Australian VET from most other VET systems in the Asia Pacific region.

Competency-based training is aimed at trying to make VET programs much more relevant to meeting the needs of industry and Australia's enterprises.

Under the Australian approach the industry training organisation network (called Industry Training Advisory Bodies or ITABs) has been heavily involved in:

- identification of the competencies required by industry from formal training at different levels
- developing industry competency standards for each training program with a system of national training packages for each industry
- identifying the qualifications that are included in each industry's national training package
- developing assessment guidelines for assessing whether or not required competencies specified in national training packages have been achieved by each trainee.

In Australia there has been widespread agreement with the move to make VET provision more relevant to industry needs, rather than continuing with the previous system where training providers largely determined the content of VET courses.

However, the introduction of competency-based training has not been without controversy, which is to be expected with such a major reform. Certainly the success with which competency-based training has been introduced to date has varied considerably across the sector.

Perhaps the most controversial element has been to shift the focus so heavily away from curriculum content and standard amounts of time in each level of training, towards only assessment of the competencies required in each case.

Some have argued that this is leading to short-term focus on specific tasks and skills relating to existing jobs, with insufficient emphasis on broader vocational knowledge and the general skills that are required in the continuous shift in technological knowledge, particularly in emerging technologically based industries and occupations.

There have also been criticisms that the development of competency-based training in Australia has been overly complex and focussed on too much detail being prescribed from the national level, with industry bureaucracies replacing the government bureaucracies that once existed.

Incorporation of a focus on the competencies needed in different areas of the labour market is really an essential feature of any world class training system. However, care is needed to ensure general skills and more general vocational knowledge is also included, where appropriate, in vocational programs so that training is not only concerned with the short-term and immediate needs of industry.

Longer term industry and national considerations are even more important. Those skills that will improve the future job mobility of individuals, as nation's continually adjust to the unrelenting pressures for structural and technological change, are more important now than at any time in the past.

7.5 The development of an industry-led training sector

Notwithstanding the above discussion, the development of new ways to ensure the skills being developed in training programs are, in fact, highly relevant to existing and future needs of industry, is an essential core feature of any effective training system

Australia has embarked upon developing an industry-led VET system at several different levels. These include:

- ANTA being established with an industry board in the early 1990s to promote the national development of Australia's VET sector
- each State/Territory training authority having a high level industry-based training board
- the full incorporation of a wide array of ITABs across all industries and States and Territories into the process of developing industry standards for the competencies required by each industry at each level of training
- much more recently, the encouragement of TAFE institutes and local training providers to work directly with local employers and industries to provide training programs that more directly meet their needs.

The latter is currently the least developed area in Australia, which probably offers the best prospects of further developing a system which better meets employer needs and which provides individuals with VET programs that will maximise their job prospects in the future.

This needs to be complemented with measures to encourage greater industry investment in training (see Robinson 1999b).

7.6 Flexible delivery and the modularisation of training delivery

Australia has developed a modularised training system. For instance in 1997 some 1.46 million people enrolled in one or more publicly funded VET courses or programs; this amounted to 1.84 million courses. It is involved enrolment in 9.88 million modules and the provision of over 300 million hours of training but only 55% of enrolments were in programs leading immediately to a Diploma or Certificate qualification.

The modularisation of VET programs involves breaking up longer courses into shorter programs (such as subjects) that are capable of assessment as each element or subject is completed. This has promoted the enrolment of a more diverse range of students in VET, particularly adults who are already employed. Modules have encouraged people to take shorter bouts of training to meet a particular skill acquisition need, without requiring them to immediately enrol in a full VET course leading to a qualification.

More work is needed in Australia to make sure all publicly-funded training is nevertheless capable of articulation to one or more full qualifications programs, should the participant decide

to do further VET modules in the future. Similar better mechanisms to record the training already successfully completed, such as the development of a national skills passport system, also needs to be further explored.

Australia's VET system is based on the concept of flexible delivery of training. The various training pathways were developed historically to:

- ensure people from rural and remote areas in Australia could gain equitable access to VET programs
- encourage more adults needing to upgrade skills to undertake VET by providing more part-time, night-time and weekend, and alternate open learning options to participate in training
- provide alternative learning options to some disadvantaged groups of Australians, such as indigenous people, people with special learning needs and people with different language requirements.

More recently, the focus has also been on ensuring that there are more work-based and non-classroom pathways for VET to ensure the skills being gained are more relevant to industry's needs.

These policies have had great success in Australia. Equitable VET participation is now largely occurring between rural and urban Australia and amongst different ethnic groups. More needs to be done, however, to improve VET access to people with disabilities.

7.7 Establishing competition amongst training providers

Australia has adopted a policy of increasing competition amongst training providers. Increasing amounts of funding, that was once exclusively allocated to TAFE institutes and other public training providers, have been made available for competitive tendering. By the end of 1996 nearly 17% of VET clients were enrolled with non-TAFE providers although 95% of the total training hours delivered were still done so by TAFE.

Not surprisingly, such a policy has been controversial. The benefits have been:

- a greater choice of training provider for industry and individual clients
- the development of specialist private training providers in new areas that were previously under-serviced
- competitive efficiencies leading to lower unit costs in some cases
- the development of a competitive environment with a much greater focus on meeting customer needs.

However, some have argued that competition has lead to a reduction in quality because of its focus on cost of delivery, and dissipation of funds that were once directed to the enhancement of the public TAFE system.

The impact of development of a training market in Australia is documented in detail in the book *The market for vocational education and training* (Robinson and Kenyon 1998).

The key issue is that such policies have produced more focus on the clients of training, which is essential. The Australian experience is also that considerable reform in this area can be achieved by opening up relatively small amounts of funding to the competitive process. It is important also to ensure the continuation of a high quality public training system.

7.8 A strong system of public training institutions

As mentioned above there have been relatively recent moves in Australia to develop competition amongst training providers and to foster the growth of private training providers so that the clients of training can have greater choice in where they obtain their training.

Notwithstanding these developments, the hallmark of the Australian system of VET over the past 30 years has been a policy by successive governments to establish and develop a comprehensive system of public TAFE colleges and institutes across the nation. The overwhelming majority of publicly funded VET training is provided through the 100 or so TAFE institutes and other government provides in around 1000 campuses across Australia.

Australia's current VET system involving a very diverse offering of VET training at different levels to such a high proportion of the total population would simply not be possible without a strong system of public TAFE institutes and other public VET providers.

Of course, there is still more to be done to ensure that VET providers, including TAFE, are even more responsive to client needs than is currently the case.

7.9 A framework for the national recognition of VET

A key development in the Australian VET system has been the adoption of the Australian Recognition Framework (ARF).

The ARF:

- is a comprehensive approach to the national recognition of VET across all States and Territories of Australia
- involves the national registration and quality assurance of training organisations seeking to:
  - deliver training
  - assess competency outcomes
  - issue VET qualifications under the Australian Qualifications Framework (AQF).

Organisations can be registered under the ARF to be able to operate in two areas:

- first, the provision of training delivery, assessment and the issuing of nationally recognised AQF qualifications
- second, the provision of skill recognition or assessment services only for the issuing of nationally recognised AQF qualifications.

These arrangements are based on two key principles, which are:

- a requirement for any AQF qualifications issued by a registered training organisations or any State/Territory training authority to be recognised by any other State/Territory training authority or registered training organisation across Australia
- a system of quality assurance to register training organisations.

These arrangements commenced on 1 January 1998 and replaced a system where each training course was assessed for national accreditation, instead of registering the training organisation.

The features of the ARF are described further in the document *Australian Recognition Framework Arrangements* (ANTA 1998b).

7.10 A focus on outputs and outcomes

A hugely important development in the Australian VET system has been in the focus placed on the outputs from and outcomes of the VET sector. This focus has accompanied the shift in Australia from a largely provider determined training system to industry and demand-led training system.

The *outputs* from VET refer to the qualifications, skills and competencies achieved from undertaking a VET program. Robinson (1998, p106) described this in the following way:

> *"Conceptually, the key outputs of the VET sector can be viewed in the following ways:*
>
> - ◊ *the qualifications attained by people successfully completing VET programs that are valued by employers and widely recognised as currency in the labour market*
> - ◊ *the skills and competencies gained by individuals to improve their economic and labour market prospects and/or to improve their skills to enable them to do their current jobs better*
> - ◊ *the skills and competencies required by business to improve the bottom line of business enterprises in terms of productivity, profitability, etc. and to contribute to Australia's overall economic competitiveness.*
>
> *A deliberate distinction is being made here between the core outputs of VET (ie skills and qualifications) and outcomes from VET such as gaining new employment, obtaining new skills to gain promotions or new jobs or gaining new skills to increase job security in existing employment."*

In recent years Australia has embarked on a process to develop nationally consistent frameworks for the treatment of VET qualifications through the adopting of the AQF and the ARF arrangements (described earlier in this paper).

Further processes are currently under way to:

- ❖ develop a set of agreed protocols to ensure nationally consistent policies are in place in each State and Territory in relation to how qualifications are awarded to VET students and trainees around Australia
- ❖ develop a nationally consistent approach to the measurement of outputs at the sub-qualification level (referred to in Australia as "units of competence").

The outcomes from VET (as distinct from the outputs) refer to ultimate outcomes from VET for individual students and trainees or for Australia's enterprises who rely on the VET sector to meet all or part of their skill requirements. In the case of individuals, the outcomes from VET include:

- ❖ gaining employment in cases where the student did not previously have a job
- ❖ improving job prospects through greater job security, gaining a promotion or a better job, more hours of work, moving from part-time to full-time employment, etc.
- ❖ increasing employment income as a result of gaining new skills.

In the case of employers, the outcomes from VET are:

- ❖ improvements in productivity as a result of skills gained from VET
- ❖ satisfaction that the VET system is meeting enterprise skill requirements.

The NCVER conducts regular national surveys to gauge the outcomes from VET. These include:

- ❖ a Graduate Destination Survey (GDS) to measure the employer outcomes of TAFE graduates
- ❖ an Employer Satisfaction Survey (ESS) to measure the level of employer satisfaction with VET provision and to ascertain employers views about the impact of VET on enterprise productivity.

The NCVER has also developed a broader VET Student Outcomes Survey (SOS) that was first conducted in 1999 to look at the job outcomes of all VET students, and not just graduates from TAFE in programs of at least 200 hours in duration.

A highly developed statistical information base is an essential ingredient to developing a training system that better meets the needs of both individuals and industry clients of the sector. It is essential that such systems place as much focus on measuring the outcomes as they do on measuring student characteristics, training activity and the costs of training.

7.11 Research and evaluation to improve VET

Australia is the only country (that I am aware of) that has developed and published a national policy to govern its research and evaluation effort in VET.

The policy called *The National Research and Evaluation Strategy for Vocational Education and Training in Australia 1997-2000* (NCVER 1997c) commenced in July 1997. The policy was developed by the NCVER, in conjunction with ANTA, to:

- increase Australia's national VET research and evaluation effort
- prioritise the national VET research undertaken to improve the quality of decision making about VET by policy makers and planners, training authorities and training providers, industry bodies, employers and enterprises, students and trainees, teachers and trainers and others with an interest in the VET sector.

Of particular importance in the policy is the dissemination of research results to interested parties in addition to carrying out various research projects as part of a co-ordinated national program of research and evaluation work. Robinson and Guthrie (1998) reported that nearly 50 research projects were undertaken or commenced in the first year of the policy, and that a further 35 projects have already been agreed to or commenced for 1998-99. National funding of over $A2.5 million per annum is directed towards the policy by ANTA and the NCVER. ANTA also provides further funding in the order of $A1 million per year to fund several dedicated VET research centres.

A comprehensive national program of research and evaluation is already providing useful strategies for continuous improvement and quality enhancement of the Australian VET sector.

This strategy includes the development of an international VET research information database by the NCVER (called VOCED) which can be accessed on the Internet http://www.ncver.edu.au/voced.htm . This database contains abstracts and other details about 14,000 VET research papers and reports, journal articles, policy documents and published statistical reports from around the world.

8. Emerging issues

The Australian VET sector has undergone a massive transformation in the past 20-30 years. This transformation has seen VET evolve from a set of disparate arrangements across the country to the comprehensive national approach that was developed during the 1990s.

Although much has been achieved, there is still more distance to travel to ensure that Australia has the fully embedded lifelong learning culture that I needs.

There are four 'big picture' issues to which the Australian VET sector needs to address more fully than is the case to date. These issues are:

- first, a set of developments that can be grouped together under the heading 'the impact of the changing nature of work"
- second, the demand by learners for far more 'customisation' in training provision than ever before
- third, the impact of the rapid aging of our population and what this means for lifelong learning and training strategies
- fourth, developing new strategies for the promulgation of a lifelong learning culture.

8.1 The changing nature of work

Globalisation and the onset of the information age (or the knowledge economy) are having as profound effect or revolutionising the organisation of work, as did the industrial revolution in the 19th century. Technology is changing at an unrelenting pace (see Maglen 1994).

NCVER research (for example, see Hall and Bretherton (forthcoming), Hobart 1999, Kearns 1999, Van den Heuval and Wooden 1999, Waterhouse et al 1999, Marginson 2000 and Robinson 2000) suggests that:

- new modes of employment are rapidly emerging, with access to employer - provided training to some of the new categories of workers (ie project workers, sessional workers, labour hire company workers etc) being significantly reduced
- technical skills are having a shorter 'half-life' these days. Gone are the days of acquiring all the technical skills one needs for a working lifetime at the beginning of a working life.
- many of the technical skills that will be needed in the workplace in 20 years time do not yet exist
- excellent technical, para-professional, or professional skills will no longer be enough.

It is becoming increasingly apparent that many more workers in the new millenium will increasingly need:

- much higher levels of *IT literacy*
- excellent *interpersonal* and *human relations* skills to get the best out of people and work well in team-working situations
- critical *analytical* and *interpretive* skills in order to handle and make sense of the enormous amount of information now available
- to be *entrepreneurial* and *enterprising*, irrespective of whether they run a business or work for others as an employee, so that new business opportunities are always being sought
- *new skills* needed to cope with spending increasing amounts of their working lives in different modes of employment (such as self employed, sessional or project workers, etc).

VET programs must be framed to ensure proper coverage of underpinning vocational knowledge and understanding, not just on competencies for 'the here and now'. Generic skills are probably now even more important than technical skills. Certainly they are no less important.

8.2 Customising VET

US research on looking at what drives customer satisfaction across all types of products and services, ranging from whitegoods to education (eg see Fornell & Johnson 1993, Fornell et al 1996 and Johnson and Fornell 1991), shows two key things:

- quality is more important than price
- customisation is more highly valued than standardisation.

NCVER's research on student and employer satisfaction and ANTA's recent market research on what learners value, bears this second finding out in relation to VET in Australia. The key message is that learners have a very diverse set of needs. One size does not fit all. Diversity, choice and VET tailored to meeting vastly different individual needs will be the key to engaging and re-engaging people in continuous skilling and lifelong learning.

Moreover, in the coming years learners will demand much more customisation. As consumers they will be much more discerning and sophisticated than ever before about making choices about how, when and where they wish to learn.

8.3 The aging population

Post school education and training is still largely geared up to providing significant professional or technical entry level training.

Population projections show that over the next 20 years:

- the Australian population is forecast to grow at 1% per annum
- but the number of 15-24 year olds will not grow (remaining at around 2.7 million people)
- whereas the number of 45-64 year olds will grow by over 40% (from just over 4 million today to some 5.8 million by 2020).

The source of new skills in countries like Australia will need to be increasingly developed amongst older and often already employed people. Policy and delivery cannot just focus on the young. This has profound implications for the way we think about education and training delivery.

Again diversity in the type of learning products and services available is the key. Particular emphasis will need to be given to what I call 'delivering VET in bite size chunks'.

VET has made a good start in breaking down curricula from full qualifications into modules that are more easily done by adult learners. This is why Australia has one of the highest rates of VET participation by the over 30's age groups in the world. We need to make sure this capacity is retained in the rollout of training packages.

8.4 Embedding a lifelong learning culture

Robinson (1999c) found that:

- over 77% of the economically active component of the Australian population aged 15-16 years is either still at school or has undertaken some form of education or training in the past year
- some 80% of wage and salary earners undertook some form of training in the past year

- over 60% of all employers provide some kind of training to their employees each year.

Yet it is not clear that all this activity is sufficiently directed to embedding a genuine lifelong learning culture that is capable of providing the new skills needed to drive Australia's economic future.

ANTA has recently conducted a major market research exercise in an attempt to unravel some of these issues.

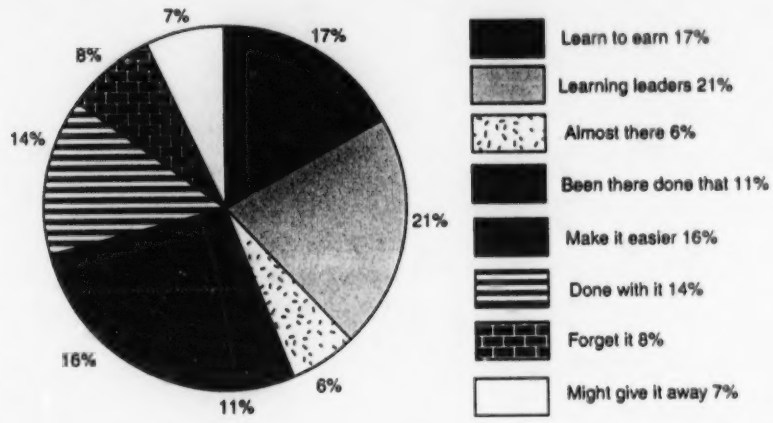
The results of this work, in terms of a physchographic segmentation of how individuals view skilling, education and training and lifelong learning in Australia, is shown in Table 23 and Figure 3. The preliminary analysis shows that there are 8 distinctive segments in the general community with very different characteristics and very different attitudes towards learning.

Table 23: General community segments

Category	Proportion of adult population (%)	Characteristics
Might give it away	7	Young and pessimistic, they are learning now only because they feel they have to. Other people expect it. They haven't seen the benefits from learning yet.
Learn to earn	17	They are actively learning because it's the way to get ahead. Mostly young, they only value learning that brings material benefits and leads to jobs or qualifications.
Learning leaders	21	They love learning and believe it's the way to reach their goals. They want to learn more but have to overcome their fears and many other barriers.
Almost there	6	They love learning and believe it's the way to reach their goals. They want to learn more but have to overcome their fears and many other barriers.
Forget it	8	Their heart is just not in it. The learning they've done hasn't got them very far, they don't love it and anyway, they are not happy with their lot. What more do they need?
Done with it	14	They valued learning for work but they've achieved what they can. They see no point in learning any more, unless they face a career reversal or some other major work change.
Make it easier	16	While they love learning, they face the highest barriers to participation. Their focus is on getting by every day. Learning is all too hard, just another stress to contend with.
Been there, done that	11	They love learning and have already benefitted from it. But it is not on the short-term agenda. They've either achieved their goals or there are just too many other priorities right now.

Source: ANTA

Figure 3: The proportion of Australians in each general community segment



Source: ANTA

Similarly ANTA's market research has identified three very different segments of employers, with respect to attitudes towards investment in training. There are described in Table 24 and Figure 4.

Table 24: Employer segments

Category	Proportion of employers (%)	Description
High achievers	44	Established, medium-sized firms in the cities, they value all forms of learning—on and off-the-job, work related or not. Learning is the way they deal with the challenges of globalisation, competition and new technology. But they also value the productivity and efficiency of learning.
Here and now	37	Large established businesses, they are focussed on keeping ahead of the competition. Dealing with new technologies and high turnover, they value on-the-job training that is not directly productive in the workplace.
Not interested	19	Smaller businesses in manufacturing and service industries, they believe in qualifications. Most other training is a waste of time and money, unless it really increases productivity and reduces costs. They are not in the global game—they are getting by.

Source: ANTA

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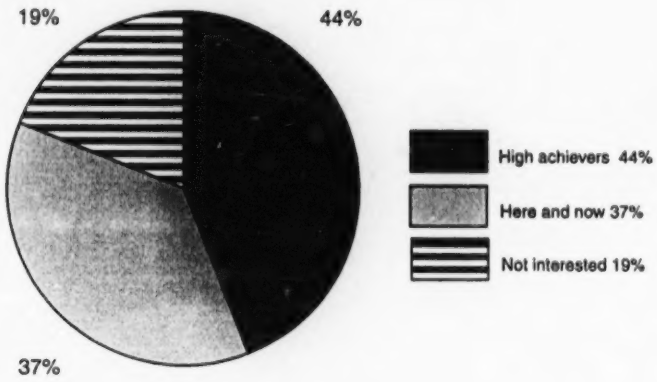
Figure 4: The proportion of employers in each segment



Source: ANTA

9. Concluding remarks

Any nation's ability to develop new approaches to education and training to meet these and other challenges will be perhaps the most important determinant of its economic and social future. Skills, and the ability to adjust, will be the core determinant of any nation's economic success. Gone are the days when plentiful traditional factors of production - land, labour and capital resources - are enough to guarantee success.

The discussion in this paper is not meant to imply that the key elements of Austrlia's VET system could or should be adopted in the People's Republic of China. Rather they are described here for the purposes of information.

Perhaps the most significant feature of the Australia VET system has been the journey in recent years to develop an industry-led system. In the past Australia's vocational education system was largely determined by the priorities of education planners and the vocational education institutes themselves.

Responding to the challenges outlined in this paper will be key "drivers" of Australia's VET system in the coming years. Nothing could be more important than trying to ensure that the skills and vocational knowledge being gained by young people and adults alike are relevant to the nation's workforce and development needs.

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